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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,900	09/27/2005	Ilan Samson	P08517US00/RFH	6600
881	7590	10/16/2006	EXAMINER	
STITES & HARBISON PLLC 1199 NORTH FAIRFAX STREET SUITE 900 ALEXANDRIA, VA 22314			MACNEILL, ELIZABETH	
			ART UNIT	PAPER NUMBER
			3767	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/518,900

Applicant(s)

SAMSON ET AL.

Examiner

Elizabeth R. MacNeill

Art Unit

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/27/05; 12/23/04</u> .                                       | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's response to the restriction requirement of 30 August 2006 is acknowledged. The amendments to the claims submitted 26 September 2006 places all claims in group 1, therefore the restriction requirement is withdrawn.

### ***Claim Objections***

1. Claim 4 objected to because of the following informalities: "the concertina sleeve" has no antecedent basis in claim 1. Appropriate correction is required.
2. Claim 13 is objected to because of the following informalities: "the actuating hand" has no antecedent basis in claims 12 or 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,5, and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by HOBBS (US 4,813,932).

Regarding claim 1, Williams teaches a breast pump comprising a body member (1) including a breast engaging portion (3 and 2) shaped to engage a region of a user's breast, a container(4) attached to the body member, and valve (25) means between the body member and the container, characterized by, within the body member, a sleeve (6) sealing (by 11) the interior of the body member from the atmosphere, the sleeve being selectively movable from a rest condition to a displaced condition by actuating means operatively connected to the sleeve, movement of the sleeve from the rest condition to the displaced condition creating an increasing volume of reduced pressure within the body member whereby firstly the valve means is closed to prevent evacuation of the container, and whereby milk is expressed by the user into the body member, and return movement of the sleeve from the displaced condition to the extended condition releasing the reduced pressure allowing the valve to open the expressed milk flowing through the valve means and into the container, the configuration of the sleeve or the material of the sleeve being such as to substantially prevent stretching of the sleeve on movement between the rest and displaced conditions. See Fig 1a, the dashed lines indicating the displaced condition and the solid lines indicating the extended condition.

Regarding claim 5, the sleeve comprises a substantially non-stretch material (a plastic)

Regarding claim 7, the actuating means comprises a lever arm (9) pivotally mounted at an intermediate region thereof to the body member, one end extent of the lever arm being for engagement by the user, and the other end extent being operatively connected to the sleeve (13)

Regarding claim 8, one end of the sleeve is secured between a collar and a defining wall of the body member whereby the interior of the sleeve is sealed ( ) from the interior of the body member, the other end of the sleeve being closed (cap on top of piston 7)

Regarding claim 9, the other, closed end of the sleeve carries an end plate (cap), a link pin (13) extending axially within the sleeve and through the collar to interconnect the end plate and the other end extent of the lever arm whereby, on pivoting movement of the lever arm by the user, the link pin is moved substantially axially of the sleeve to compact the sleeve (Dashed and solid lines in Figure 1A)

Regarding claim 10, the end plate, link pin, sleeve and lever arm comprise an integral unit (Fig 1A)

Regarding claim 11, flexible joints are incorporated at one or both ends of the link pin. (See rotation at dashed lines at the topmost portion of the link pin, Fig 1A)

Regarding claim 12, the actuating means comprises an operating member (9) one end of which is secured to a closed end of the sleeve and the other end of which carries a thumb-receiving element for receiving the thumb of a user (45).

Regarding claim 13, a handle member (neck of the pump) is provided as a rest and grip for the fingers of the actuating hand, said handle being rigidly secured to the pump body, the arrangement being such that, on location of the thumb in the thumb-receiving element, and on pulling of the thumb towards the fingers, the base of the sleeve is pulled in the direction generally away from the breast.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobbs as applied to claim 1 above, is further view of STEMLIN (US 3,399,695)

Hobbs teaches a breast pump with a manually actuated sleeve member with is contracted and expanded in order to produce a vacuum pressure in the body of the breast pump in order to allow expressed milk to flow into the container of the breast pump. Hobbs does not teach a concertina bellows.

Stemlin teaches a vacuum producing fluid valve comprising a sleeve which is of generally concertina shape (36), and is selectively movable between an extended rest condition and a compacted displaced condition (of which the extended rest position is shown in Figure 1) where the concertina shape has a closed base (76) thereto at least part of which is substantially rigid, movement of the sleeve being by pulling the base from inside the sleeve so as to contract its length (via piston rod 68) and the concertina sleeve is of an elastic material the inherent properties of which are such that, on release of the actuating means by the user, the sleeve returns to its extended condition within the body member (shown in Figure 1) and the sleeve includes a flexible layer to which is bonded or which is inlaid with a substantially non-stretch layer (the flexible layer is

described in Col 4, 2<sup>nd</sup> full paragraph). The flexible layer is bonded to a non-stretch at each end of the bellows.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the breast pump of Hobbs with the concertina bellows of Stemlin in order to construct a fluid tight and inexpensive valve (Col 2 2<sup>nd</sup> full paragraph)

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hobbs as applied to claim 1 above, and further in view of BACHMAN (US 5,843,029).

Hobbs teaches a breast pump with a manually actuated sleeve member with is contracted and expanded in order to produce a vacuum pressure in the body of the breast pump in order to allow expressed milk to flow into the container of the breast pump. Hobbs does not teach a duck bill valve in the body member, but rather teaches a generic valve 25.

Bachman teaches a manual breast pump with a duck-bill valve (24A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the breast pump of Hobbs with the duck bill valve of Bachman because duck-bill valves are common in the art of breast pumps.

5. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hobbs as applied to claim 1 above, and further in view of YTTEBORG (US 2003/0153869).

Hobbs teaches a breast pump with a manually actuated sleeve member with is contracted and expanded in order to produce a vacuum pressure in the body of the breast pump in order to allow expressed milk to flow into the container of the breast

pump. Hobbs teaches a generic horn and horn insert (Fig 1) for contacting the breast of the user, but does not teach the particulars of the horn claimed by the applicant.

Ytteborg teaches a breast cup (2) for use with a breast pump, the horn being shaped to engage a region of a user's breast, and being of a rigid material (12) and having bonded thereto at least one region of soft, elastic material (14) the soft material of the or each region infilling an associated aperture through the rigid material to comprise the thickness of the horn at said region, which the rigid material is polypropylene or polycarbonate, and the soft elastic material is a thermoplastic elastomer (P0031-P0032), in which there are two opposed regions of soft, elastic material remote from the open end of the horn, one for location above the breast and one for location below the breast adjacent the nipple for manipulation by the thumb and a finger of the user (portions 13). Alternatively, the whole of the internal area of the rigid material is lined with said soft material (portions 14). Additionally, the outer peripheral edge of the horn comprises a lip of said soft material encasing the periphery of the rigid material (not labeled, rim). Finally, the horn is constructed by a two-shot moulding with the soft, elastic material permanently bonded to the rigid material by virtue of the inherent characteristics of the materials (Fig 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the breast pump of Hobbs with the breast cup of Ytteborg in order to provide a breast cup which is comfortable in use, soft and able to adapt to the various shapes and sizes of the breast and easy to use (P0013).



**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth R. MacNeill whose telephone number is (571)-272-9970. The examiner can normally be reached on 7:00-3:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ERM



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SUPERVISOR, PATENT EXAMINER  
